

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 10: (Cancelled).

11. (Previously Presented) A method for determining speech quality using an objective measure, the method comprising:

calculating a speech quality characteristic value by comparing respective spectral short-time properties of an assessed speech signal and of a reference speech signal;

prior to the comparing the respective spectral short-time properties, reducing differences in respective mean spectral envelopes of the assessed speech signal and of the reference speech signal by weighting spectral short-time properties of the assessed speech signal and the reference speech signal in a predetermined number of time segments using a spectral weighting function so as to include differences in the respective mean spectral envelopes in the speech quality characteristic value to a limited extent, the spectral weighting function being calculated from the respective mean spectral envelopes; and

calculating a respective intensity value for each of a plurality of frequency bands in a signal segment respectively for the assessed speech signal and the reference speech signal using variable limits for the frequency bands so that a respective difference between each calculated respective intensity of the assessed speech signal and the reference speech signal is reduced, wherein the calculating of the respective intensity value for each of the plurality of frequency bands is performed before the calculating the quality characteristics value and is performed by integrating a respective signal intensity, the width of the frequency bands being constant on a pitch scale and further comprising calculating a respective specific loudness from the respective intensity values in the respective frequency bands, the limits for the frequency bands being selected so that differences in the calculated respective specific loudnesses between the assessed signal and the reference speech signal are a respective minimum in each frequency band in the signal segment.

12. (Previously Presented) A method for determining speech quality using an objective

measure, the method comprising:

calculating a speech quality characteristic value by comparing respective spectral short-time properties of an assessed speech signal and of a reference speech signal;

prior to the comparing the respective spectral short-time properties, reducing differences in respective mean spectral envelopes of the assessed speech signal and of the reference speech signal by weighting spectral short-time properties of the assessed speech signal and the reference speech signal in a predetermined number of time segments using a spectral weighting function so as to include differences in the respective mean spectral envelopes in the speech quality characteristic value to a limited extent, the spectral weighting function being calculated from the respective mean spectral envelopes; and

calculating a respective intensity value for each of a plurality of frequency bands in a signal segment respectively for the assessed speech signal and the reference speech signal using variable limits for the frequency bands so that a respective difference between each calculated respective intensity of the assessed speech signal and the reference speech signal is reduced., wherein the calculating of the speech quality characteristic value is performed based on a similarity of respective spectral representations of the assessed speech signal and the reference speech signal in a plurality of time segments, the respective similarity representing a respective correlation coefficient between the respective spectral representations of the assessed speech signal and the reference speech signal in a respective time segment of the plurality of time segments averaged over the plurality of time segments.

13. (Previously Presented) The method as recited in claim 12 wherein the respective spectral representations include the respective spectral short-time properties.

14. (Previously Presented) The method as recited in claim 12 wherein the respective correlation coefficient is calculated from a subset of the respective spectral representations.